•Communication Information Systems Officer Course (CISOC)
   •23-week long entry level 0602 Lieutenants.
   •Two courses per year, 70 students per course.
•C4 Occupational Field Expansion Course(C4OFEC)
   •8 week advanced course for 0602 Captains
•C4 Warrant Officer Course(C4WOC)
   •6 week Summer course for 2510, 2810, & 4010 WO

•Advanced Communication Information Systems Officer Course(ACIS)
   •2 week Summer refresher course for field grade 0602 officers
•Communication Information Systems Officer Refresher Course(CISOR)
   •2 week Summer refresher course for company grade 0602 officers
•Tactical Cryptological Communication Course (TCCC)
   •5 week course for Signals Intelligence Lieutenants

Command and Control Systems School

Colonel Dennis Thompson, USMC, Director

MISSION

Provide entry-level, advanced and refresher training for command and control systems officers. Additionally the school provides tactical communication training and familiarization for future signals intelligence officers and MOS training for C4 warrant officers.

WEB SITE

http://www.mcu.usmc.mil/ccss

HISTORY

The Command and Control Systems School provides courses at Edson Hall, Quantico, Virginia. Formerly the Communication Officers School, it was established 1 June 1944 under Lieutenant Colonel C. Nelson. A twenty-week course, the Communication Officers Course was designed to standardize communications throughout the Marine Corps by teaching the newest techniques and equipment. The first class, which was the forerunner to the Advanced Communication Officers Course, graduated on 18 October 1944. In 1952, a Reserve Communication Officers Indoctrination Course was added to the school's mission in an effort to provide communication instruction to members of the Fleet Marine Corps Reserve. The Reserve course was expanded to two-week Phase I and Phase II courses to qualify reserve officers as communicators.

On 2 February 1954, ground was broken for a new building, which cost $300,000. At Quantico, on 12 December 1955, the new building was officially dedicated and named Edson Hall in honor of Major General Merritt A. Edson, USMC: a World War II hero and leader of the famed Edson's Raiders. One reason for naming the school after Major General Edson was that he always emphasized communications in combat.

The first Communication Officers Orientation Course convened on 25 April 1955. The four-week course was designed to give the recent Basic School graduate a background in communications before transferring to the Operating Forces. The basic course evolved into the Basic Communication Officers Course and the length varied from four to eighteen weeks through 1995. In 1996 the Marine Corps consolidated communications and data systems officer specialties into one Military Occupational Specialty (MOS) 0602. The title "Communication Officer" was changed to "Communication Information Systems Officer" and, in April 2000, changed again to "Command and Control Systems Officer."

In 1973, the advanced course lengthened to forty-one weeks and additional emphasis was placed on amphibious command and control

techniques. This course changed again in 1989 to the Command and Control Systems Course, to address advances in command and control systems currently used by commanders as they endeavor to control and direct forces. In 2002 this course merged with Amphibious Warfare School to form the Expeditionary Warfare School.

In 1997 the Phase I and Phase II Reserve Communication Officers Courses were replaced by two Total Force summer courses. The Advanced Communication Information Systems (ACIS) Course was designed for mid and senior level active and reserve field grade officers. The Communication Information Systems Officer Refresher (CISOR) Course was designed to support active and reserve company grade officers.
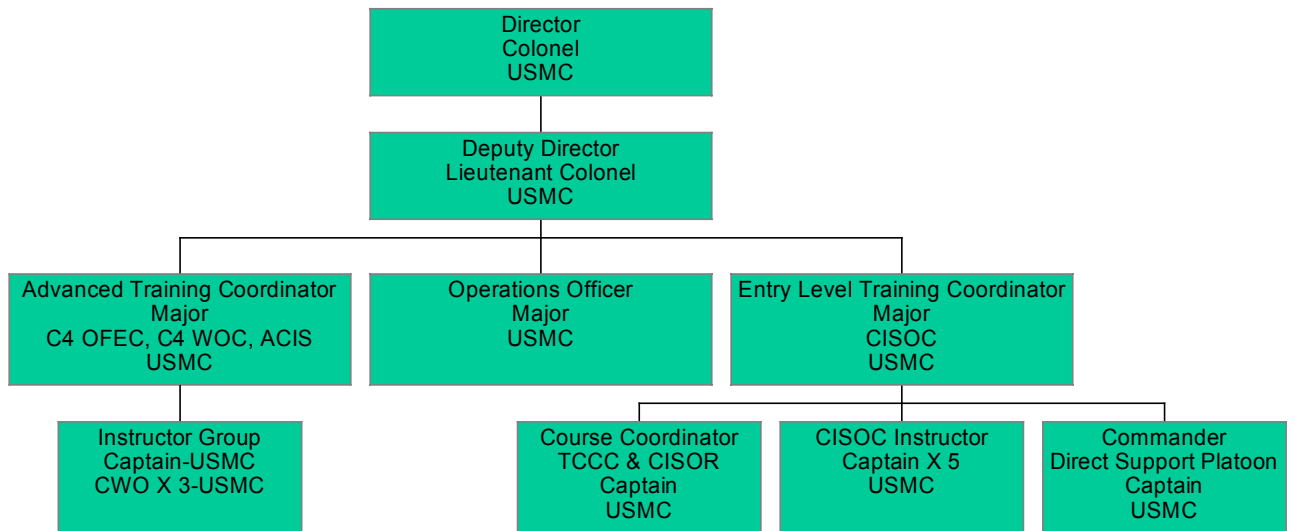
In 2001 the Warrant Officer Course (WOC) and the Tactical Cryptological Communication Course (TCCC) were approved. The WOC is designed to train C4 Warrant Officers (MOS 2510, 2810, 4010) in the fields of transmissions, telephony, and data networks. The TCCC course is designed to provide a foundation of tactical communications for Signals Intelligence officers.

Command and Control Systems School continues to provide quality instruction to selected Marine Corps Officers, sister service, and international officers. Many graduates of this school have achieved success in a wide variety of endeavors. Included in the list of distinguished graduates are Senator John Warner and General Alfred M. Gray, former Commandant of the Marine Corps.

ORGANIZATION

The following diagram illustrates the structure of the Command and Control Systems School:

Command and Control Systems School

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                    ┌─────────────────┐
                    │    Director     │
                    │    Colonel      │
                    │     USMC        │
                    └─────────────────┘
                             │
                    ┌─────────────────┐
                    │ Deputy Director │
                    │Lieutenant Colonel│
                    │     USMC        │
                    └─────────────────┘
                             │
        ┌────────────────────┼────────────────────┐
┌──────────────────┐ ┌──────────────┐ ┌──────────────────────┐
│Advanced Training │ │  Operations  │ │ Entry Level Training │
│   Coordinator    │ │   Officer    │ │     Coordinator      │
│     Major        │ │    Major     │ │       Major          │
│C4 OFEC, C4 WOC,  │ │    USMC      │ │       CISOC          │
│  ACIS  USMC      │ │              │ │       USMC           │
└──────────────────┘ └──────────────┘ └──────────────────────┘
        │                                        │
┌──────────────────┐         ┌──────────┬────────┴────────┬──────────────┐
│ Instructor Group │  ┌──────────────┐ ┌──────────────┐ ┌──────────────────┐
│  Captain-USMC    │  │   Course     │ │    CISOC     │ │    Commander     │
│  CWO X 3-USMC    │  │ Coordinator  │ │  Instructor  │ │Direct Support    │
└──────────────────┘  │TCCC & CISOR  │ │ Captain X 5  │ │    Platoon       │
                      │   Captain    │ │    USMC      │ │    Captain       │
                      │    USMC      │ │              │ │     USMC         │
                      └──────────────┘ └──────────────┘ └──────────────────┘
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Billet	Rank	DSN	Commercial
Director	**Col**	**278-2960**	**(703) 784-2499**
Deputy Director	**LtCol**	**278-2960**	
Operations Officer	**Maj**	**278-4809**	
Advanced Training Coordinator	**Maj**	**278-4808**	
CISOC Coordinator	**Maj**	**278-4337**	
TCCC Coordinator	**Capt**	**278-4335**	
CISOR Coordinator	**Capt**	**278-4820**	
Platoon Commander	**Capt**	**278-5837**	

EDUCATIONAL PHILOSOPHY

"Training Information Warriors for the 21st Century"

Command and Control Systems School produces leaders at the company grade level who are technically proficient, mentally alert, and who have a vision of the use of technology to enhance warfighting capabilities

EDUCATIONAL OBJECTIVES

As a part of Marine Corps University, the Command and Control Systems School (CCSS) is acknowledged as a premier service school for training entry level officers for basic command and control systems (C2S). Graduates of the entry-level school are prepared to meet the challenges of the Operating Forces and Supporting Establishment at the tactical level.   Other company grade officers, captains and warrant officers, are developed to be proficient and confident with all aspects of the MAGTF as a part of the total Marine Corps and Navy team. Field grade officers are provided skills and education to serve in senior MAGTF G-6 assignments and on Joint and Combined high-level staffs. CCSS is a leader in military thought, innovation, and adaptability to changing command and control requirements and technologies.

STUDENT BODY

The Student Body at CCSS consists of Marine Officers, other Service officers, and international officers from the rank of second lieutenant to senior field grade. Each of the six courses has a unique student body.

CISOC students are normally Marine Corps second lieutenants recently graduated from The Basic School with some company-grade students who made lateral moves from other MOS's. Students arrive at the course with the basic 0601 MOS and qualify for the MOS 0602, Command and Control Systems Officer, after successful graduation and six months of experience. International students also attend CISOC.

The C4 OFEC provides MOS skill progression training for 0602 captains. The focus is on planning MAGTF communication and information system architectures.

The C4 WOC provides all newly designated C4 warrant officers with six weeks of training following their graduation from The Basic School (TBS), as well as other C4 WO's and CWO's currently serving in the fleet.

ACIS Course students are typically Marine Corps field-grade officers from both the active and reserve components. These officers are in MOS 0602 or hold MOS 0602 billets.

CISOR Course students are company-grade or junior field-grade Marine Corps in MOS 0602 or a related field. They come from both the active and reserve components and are often returning to a MOS 0602 Operating Forces billet following duty in a "B" billet or in the Supporting Establishment.

TCCC students are company grade Marine Corps Officers (normally Lieutenants) in the MOS of 0206, Signals Intelligence, entry-level training pipeline.

CURRICULUM

Communication Information Systems Officer Course (CISOC) Curriculum

The Data Systems Officer Course (13 weeks) and the Basic Communication Officer Course (18 weeks) merged during July 1996 and the combined course is now called the Communication Information Systems Officer Course (CISOC). It is taught at the Command and Control Systems School in Quantico, VA. Students remain aboard Quantico after The Basic School and report to their next command after attending school. The course is 23 weeks in length and prepares entry-level officers for MOS 0602, Command and Control Systems Officer.

The primary goal of the course is to ensure that students gain mastery of the fundamental techniques and skills required for the planning and employment of Marine Corps command and control systems in both tactical and garrison environments. Students receive over 1150 hours of instruction including lectures, numerous equipment practical application exercises, computer labs, and two field exercises. The course has a personal computer lab with 60 workstations and a networking lab to support data systems training.

Students learn the basics of how a tactical data system works, how to interface it with tactical communications systems, and how to troubleshoot the systems. To validate the training conducted in the classroom and during practical applications, the course has two separate field exercises of up to ten days each. During the exercises, students are assigned billets. They develop, brief, and execute a Communication Plan (COMMPLAN) for each of the exercises.

Major Subject Areas

 (1) Introduction to USMC Communications and Information Systems
 (2) Single Channel Radio
 (3) Electronic Key Management System (EKMS)
 (4) Introduction to Data Communications Network
 (5) Introduction to Local Area Networks
 (6) Switched Backbone
 (7) Communications Plans and Orders
 (8) MAGTF Command Element Communication Information Systems
 (9) FMF Communication Organizations
(10) Power
(11) Introduction to Maintenance Management
(12) Introduction to Training Management

C4 Occupational Field Expansion Course (OFEC) Curriculum

The C4 Occupational Field Expansion Course (OFEC) provides skill progression training for 0602 captains. It builds on the foundation provided by CISOC and prepares captains to be MAGTF G-6 Plans Officers. The curriculum is focused on MAGTF C4 systems planning and interfacing with Joint and Combined C4 systems. The course addresses the planning and employment considerations for transmission, voice switching, data networking, video-teleconferencing, Global Information Grid (GIG) services access and connectivity, communications security, information assurance, and C4 planning processes and documents. Sister Service and International Officers also attend the C4 OFEC.

C4 Warrant Officer Course (C4WOC) Curriculum

The objective of the C4 Warrant Officer Course (C4WOC) is to provide a formal training program for warrant officers in MOS of 2510, 2810, and 4010. The course produces technical experts in the fields of transmissions,

telephony, and data networks. The C4 planning expertise of these technical experts is also a critical focus of the course.

The C4 WOC provides all newly designated C4 warrant officers with six weeks of training following their graduation from The Basic School (TBS), as well as other C4 WO's and CWO's currently serving in the fleet. Three weeks of advanced C4 training in their unique areas of expertise combined with one week of cross training and two weeks of their role in the USMC Planning Process. The synergy that is required will be developed through a combination of lecture, discussion, and practical application.

Advanced Communication Information Systems (ACIS) Course Curriculum

The objective of the Advanced Communication Information Systems (ACIS) Course is to provide refresher training for field grade officers in MOS 0602, Command and Control Systems Officer. The mission is to provide current and necessary information to optimize the effectiveness of 0602 officers serving in MAGTF G-6 or joint staff J-6 billets. The purpose of the instruction and detailed application is to enable the mid and senior level officers to understand, plan, and manage a significant quantity of increasingly complex technical equipment and connectivity requirements. Highlights of the course include exposure to joint command and control issues, instruction on C4 planning processes, and an "ACIS Toolkit" which is provided to each student in CD-ROM format.

The ACIS Course is a two-week course of instruction with class seats designated for active duty and reserve, field grade Marine and other service officers, designated to serve or serving in MOS 0602 billets. The course provides a unique opportunity for active and reserve counterparts to meet and share insights and experiences.   The ACIS Course is conducted at CCSS annually in June with a maximum capacity of 50 students.

Communication Information Systems Officer Refresher (CISOR) Course Curriculum

The Communications Information Systems Officer Refresher (CISOR) Course targets active and reserve MOS 0602 officers at the company grade level who have served a tour out of their MOS and reserve officers serving in MOS 0602 related billets. The course provides both a technical overview and a refresher of major USMC communications and information systems.

The CISOR Course is a two-week, "total force" course of instruction conducted at CCSS annually, with a maximum capacity of 50 students. The target population includes active duty MOS 0602 officers moving to the Operating Forces from billets outside the Operating Forces, and reserve officers serving in 0602 billets. The course provides both a technical overview and a refresher of major USMC communications and information systems.

Reserve students are selected by the Staff Training Course selection board at HQMC (RAM-4). Active duty students may attend on funded temporary additional duty (TAD) orders or be sent "TAD enroute" to their new duty station via permanent change of station orders.

Tactical Cryptologic Communication Course (TCCC) Curriculum

TCCC is a five-week course designed for entry-level Signals Intelligence Officers, MOS 0206, as supplemental instruction to that which they receive at the Naval Cryptologic Officers Basic Course (NCOBC) in Pensacola, Florida. Offered four times a year, TCCC focuses on providing its students with a basic understanding of communications theory and tactical communications systems organic to the Marine Corps. Instruction includes classes on secure analog and digital radio, telephone, and data systems equipment planning and operations to better prepare them for service in the FMF.

STUDENT EVALUATION

The evaluation system establishes and emphasizes high academic standards appropriate to entry-level and sustainment training. Grading by course coordinators is based on a variety of oral, written, and practical application evaluations with an emphasis on quality seminar contribution. A cumulative average of 80-percent is required to graduate from entry-level training (CISOC). Remediation is required for all students who fail to meet a passing score for individual courses.

AWARDS

The Command and Control Systems School Awards Program is designed to recognize superior achievement and encourage excellence by each student.   Honor Graduates are recognized during the graduation ceremony

and their official records are appropriately documented. Awards are described below:

Communication Information Systems Officers Course (CISOC) Awards. CISOC presents the following awards:

(1) **Honor Graduate Award.** The CISOC graduate with the highest final overall score for the course is the Honor Graduate and receives a plaque from the Marine Corps Association.

(2) **Commanding General's Honor Roll.** The Honor Roll recognizes those officers who graduate in the top ten percent of their class. Academic achievement is considered in conjunction with demonstrated leadership and contributions made to the professional development of fellow students. Students are recognized with a letter from the Commanding General, which is included in their permanent records.

(3) **Academic Honor Award.** The CISOC graduate with the highest academic average for the course receives the CISOC Academic Honor Award and receives an engraved plaque provided by the Armed Forces Communication and Electronics Association. The student's name is also added to a permanent plaque displayed at CCSS.

Current information about the school, staff, and classes in session may be found at the web site.